Role of Engineering Sciences on Sustainable Solutions Toward a Circular Economy

PLENARY LECTURE ESS-2016 February 18-19, 2016 Denver, Colorado, USA

Florian Kongoli^{1,2,3}

¹CEO, LOGEN Technologies Inc. Montreal, QC, Canada, H3P 2T1

²Chairman, FLOGEN STARS OUTREACH, Montreal, QC, Canada, H3P 2T1

³CEO, FLOGEN Technologies Inc., Wilmington, De, 19808, USA fkongoli@flogen.com

Sustainable solutions for a circular economy should be a prerequisite criteria in evaluating the objectives and outcomes for any project in any field of life. For heavy multibillion dollar industries of metals and materials extraction these constitute major criteria since their impact in the world is much more pronounced.

Although the products of metals extraction industries are tremendously used in all aspects of modern life, confusion exists in the perception of the society about on their role on circular economy solutions. They are perceived by the public as polluters that impede the sustainable development.

This plenary paper will give an overview of various aspects of sustainability solutions for a circular economy. The important role of extraction technologies and that of engineers and scientists in this direction is shown. The need for better society recognitions of scientists and engineers is particularly emphasized.

Key-words: metallurgy, mineral materials processing, engineering, sustainability, environment, technologies, scientists and engineers' role.